AMERICAN SWISS

SWISS PATTERN

FILES of Precision



AMERICAN SWISS FILE & TOOL COMPANY

410-416 Trumbull Street

Elizabeth, N. J.

"AMERICAN SWISS"

Swiss-Pattern

FILES of PRECISION

Made in U.S.A.



"The Old File Cutter"
(Before file-cutting machines were invented)







American Swiss File & Tool Co.
410-416 Trumbull Street . Elizabeth, N. J.



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Tools

Types of "American Swiss" Files

The line of "American Swiss" Swiss-Pattern Files has been steadily expanded to meet the increasing demands for files of precision required by tool and die makers in every industry, jewelers, watch makers, and where other types of precision work are required. Today, the "American Swiss" line includes more than 3000 different shapes, cuts and sizes of precision files, as described and listed on the following pages. This extensive line assures exactly the right file for every precision job.

"American Swiss" Swiss-Pattern Files of Precision should not be confused with the regular American-Pattern files which not only cost less but

which make no claim to the superior hardness, cut and lasting qualities of a Swiss-pattern file of precision. "American Swiss" Swiss-Pattern Precision Files are manufactured with as much care as the finest tools, and there are between twenty-five to thirty operations necessary in the process of their manufacture.

All "American Swiss" Swiss-Pattern Files of Precision are double cut, excepting certain shapes not classed as Swiss type, but listed as Mill, Taper Saw and open cut. These are single cut, and have been added to our line because of the insistent demand for superior quality in these kinds of files.

The "American Swiss" Trade Mark

As an appropriate and distinguishing identification of "American Swiss" Swiss-Pattern Files, a selection was made from the recognized symbols of each nationality, combining a Swiss Cross with two

American stars, together with statement of the Company's products and its motto.

This trade mark is stamped on every "American Swiss" product.

"ONLY THE BEST ARE GOOD ENOUGH"



Mr. E. P. Reichhelm, Founder, American Swiss File & Tool Co.

The Origin of "American Swiss" Swiss-Pattern Files

THE American Swiss File & Tool Company was founded in 1900 by Edward P. Reichhelm. Up to that time, American manufacturers had tried in vain to equal the high quality of the precision files which had been imported from Switzerland.

Mr. E. P. Reichhelm was particularly well qualified to solve this problem. Following his early training as a machinist's apprentice, which was interrupted by five years of service in the Civil War, he had developed and manufactured for many years various types of implements for work requiring precision tools.

Recognizing the importance of uniformity in heat treatment of the steel for such tools, Mr. Reichhelm originated the modern gas furnace for industrial purposes, and organized The American Gas Furnace Co. to develop this type of furnace commercially. By the time he conceived the idea of manufacturing precision files, Mr. Reichhelm was therefore able to bring to this challenging task a unique experience in each of the essential manufacturing processes of making fine tools.

The Swiss-pattern file business started by Mr. E. P. Reichhelm was a success from the start, due to the skill with which his "American Swiss" Swiss-Pattern Files were made, and to the care and conscientiousness which he insisted upon during each step in their manufacture.

These standards have been faithfully continued throughout the more than 40-year progress of the company under the direction of both Mr. E. P. Reichhelm and his son, Paul F. Reichhelm, who has conducted the business for the last 25 years.



Factory of American Swiss File & Tool Co., Elizabeth, N.J.



Reasons for the Superiority of "American Swiss" Files

Before Mr. E. P. Reichhelm demonstrated that precision files could be made in this country at least as well as abroad, it had been assumed that Swissmade files were superior because they were made by hand, thereby permitting the pressure or force used in cutting the teeth to follow the variations in hardness which were considered to be unavoidable at different parts of each file.

However, the industrial gas furnace developed by Mr. Reichhelm now permitted the correct degree of hardness to be maintained uniform throughout the length of every file heat-treated in this type of furnace. By assuring this prime requisite, it became possible to apply American machines and American production methods to the remaining steps in the manufacture of Swiss-pattern files. A machine-made product could now be made in America with a quality at least the equal of, or better than that of the imported Swiss-pattern files.

Other factors have also confributed to the success of "American Swiss" Swiss-Pattern Files. These files have always been made of the finest obtainable file steel—not ordinary tool steel. The workmen engaged in the manufacture of these precision files

are specially trained and long experienced, many of them having been engaged in their tasks for a quarter of a century and over. Every operation is performed with precision equipment, set to close tolerances—whether temperature in the case of forging, annealing and hardening operations, or accuracy of size and cut in the case of machining operations. And finally, no "seconds" or "ordinary run" "American Swiss" Files are ever placed on the market. A rigid inspection system weeds out every imperfect file, and such files are immediately ruined in an acid bath and scrapped.

As the largest manufacturer specializing exclusively in American-made Swiss-pattern files, this concern has developed an organization with exceptional manufacturing facilities and with a single standard of care and precision for every manufacturing process. This standard is most fully expressed by the Company's motto "Only the best is good enough." The fact that the Company does not engage in the manufacture of any commercial grades of files is indicative of its firm stand against compromising with quality.



How to Order "American Swiss" Files of Precision

Select from catalogue the shape, length, cut, also width and gauge of file required for work. All files are measured by length of cut excepting die sinkers' rifflers, silversmiths' rifflers, needle, escapement, and machine files. These are measured overall. For comparative cuts of "American Swiss" Files and American-pattern files, see Page 8.

If in doubt as to the proper file to use for your particular class of work, write to our Problem De-

partment, stating the kind and shape of the material used as well as description of your work.

Be sure to specify "American Swiss" Swiss-Pattern Files, and order from our nearest distributor.

Special Files

Files differing in any respect from those regularly carried in stock, as per our price list, are known as specials, and we will be pleased to make an estimate on receipt of specifications, samples or drawings.



Filing a delicate part of an electric meter with an "American Swiss" needle file.



Filing insert teeth on a cutter with an "American Swiss" file.



What Users Say About "American Swiss" Files

(These quotations are from unsolicited letters which have been sent to us by enthusiastic users.)

"American Swiss" File Quality

"Consider them the best file buy at any price."

"Fully equal to imported files."

"Superior to any other Swiss-pattern file manufactured in this country."

"Have yet to find a better brand of files."

"From 15 years of experience find them to be the best."

"Uniformly satisfactory as to quality, life, and cost."

"Find them satisfactory for every operation on which we have used them."

"Always uniform in temper."

"Can always depend on their true temper and uniformity."

"Through their use we have forgotten our file troubles."

"Aid us to maintain the high standard of quality for which our products are known."

"Count us as one of your many satisfied customers."

"The kind we have always needed in our work."

"American Swiss" File Durability

"Stand up under the most exacting conditions."

"Remarkable how they stand the abuse and hard usage to which we subject them."

"Retain nice sharp corners after severe tests."

"Hold their edges longer and outwear any other file we have tried."

"Find them more accurate for shape and longer-lived than any other file."

"American Swiss" File Economy

"Give us service at minimum cost."

"They save us time and money."

"Their accuracy in cut, spacing of teeth, and trueness in temper make them the most economical."

"We are 100% American-Swiss, for they save us time and money."

"Outfile and outlast all other makes that we have tried."

"Save approximately 30% on file costs."

Facts and Figures About "American Swiss" Files

Made in U.S.A.

By specialists on Swiss-pattern files exclusively. With more than 40 years' experience in file making.

A file to fit the most intricate filing job.

Over 3000 different shapes, sizes and cuts.

More than 38 shapes—7 cuts—Nos. 00, 0, 1, 2, 3, 4, and 6.

Most shapes made from 3-in. to 12-in. in length. Made as closely to size as humanly possible—tolerance ±.002-in. in some shapes.

Made of highest grade file steel—not tool steel. From 25 to 30 operations in their manufacture. All Swiss-pattern files are double cut.

All files cut from tang to extreme point.

Have larger filing surface than most other Swisspattern files made in U. S.

Specially keen filing edges—cut faster.

Uniform hardness assured by special heat treating with automatic control and regulation—to within \pm 5°F.

Every file rigidly inspected for shape, cut, size and hardness.

Every file guaranteed for performance.

Large factory stocks maintained at all times.

Sold at standard prices.

Special files made to order.

Expert advice on filing problems.



Filing small parts with "American Swiss" machine files on filing machines.



Finishing up a die with an "American Swiss" needle file.



Bars of special file steel in section of stock room



Section of Forge Department



Section of Grinding Department



Section of Stripping Department

How "American Swiss"

Some time ago, an article in "Machinery" stated that file makers, in general, like to give an air of mystery to their business, with hints and suggestions of complicated special machinery, and secret formulas and processes for heat treating.

The American Swiss File & Tool Co. follows no such policy. Visits of file users are welcome—in fact, solicited, for an inspection of the accurate, careful manufacturing processes and the skilled, conscientious mechanics at work on the preparation of these files of precision is the most convincing evidence we could offer of the high quality of our products.

The illustrations on these pages show some of the many operations (totaling 25 to 30) in the manufacture of "American Swiss" Swiss-Pattern Files. The stock is first sheared to the proper length, and then each blank is forged to the desired shape. The all-important annealing process is automatically controlled to \pm 5 deg. Fahr. to assure correct and constant temperature, together with negligible oxidation. The resulting degree of hardness is so closely uniform throughout each annealed blank, that rejections are astonishingly few in spite of the rigid inspection and test given each individual file.

In order to provide the smooth, even surface necessary to form sharp teeth of uniform height, the blanks are then ground by machine or by hand, depending on the shape of the surface. The finishing touches for the surfaces and shapes are provided by draw-filing or "stripping."

The next important process is cutting the teeth, the method varying with different shapes of files. Some are chisel-cut by machines, and others are cut by a process called etching, requiring a special etching tool which we developed and manufactured. Each of these processes requires a high degree of skill, and the men engaged in this work have long experience. As a result of this skill and the accurate cutting equipment and uniform degree of hardness obtained in the annealing process, each file has remarkably sharp, even teeth of equal depth and regularity.



Cutting Department, Section 1



Files Are Made

In the important hardening process the files are coated to prevent scale or oxidation and to prevent lead from clinging to the teeth. In this process, lead baths which are automatically pyrometer-controlled to \pm 5 deg. Fahr. develop the correct heat. The quenching is done in brine tanks by a constant flow of brine, which is cooled and thermostatically maintained at the proper temperature. The final cleaning process includes a lime water bath and a fine sand blast which leaves each file clean and sharp. In this quick survey of the manufacture of "American Swiss" Swiss-Pattern files of precision, mention of many refinement operations has been omitted, but use of any of these files shows the results: perfect teeth, exceptional toughness, and long-sustained accuracy that assure truer and faster cutting, longer life, and lower filing costs.

Ever since the founding of the business, the Company's motto has been

"Only the Best Are Good Enough"



Any file stamped on the tang or handle with the "American Swiss" trademark of a Swiss cross flanked by an American star at each side, as illustrated on every page of this catalog, can be bought with complete confidence that it is perfect in every respect.

Guarantee of Quality

Every "American Swiss" Swiss-Pattern File is guaranteed to be accurate in size and cut, and uniform in hardness throughout its length. Files which are not up to standard in any respect can be returned to us at our expense, when the fault found is pointed out to us.



Cutting Department, Section 2



Section of Etching Department



Section of Hardening Department



Section of Packing Department



Section of stock of finished files



Comparison of Cuts

"American Swiss" Swiss-Pattern Files and American-Pattern Files











No. 00

Bastard

"American Swiss" Swiss Pattern No. 0 No. 1

No. 1 No. 2

American Pattern
Second Cut Smooth

No. 3











Super Smooth

"American Swiss" Swiss Pattern No. 4

American-Pattern Files have no equivalents of our Nos. 0, 4 and 6.

"American Swiss" Swiss Pattern No. 6

Suggestions for the Use and Care of "American Swiss" Swiss-Pattern Files

Be sure to use the most suitable shape, cut and size of file for each filing operation. With more than 38 shapes, seven grades of cut, and the many sizes available in most shapes of "American Swiss" Swiss-Pattern Files, the proper selection can be assured.

Ordinarily, the file should be held horizontally for best results. This may not always be feasible, and some craftsmen have their own preference as to angle, but the horizontal position usually permits most complete control and greatest effectiveness of effort.

For the average kind of work, the piece to be filed should be about elbow height. If fine and delicate filing is to be done, the piece should be somewhat higher so as to be closer to eye level. Heavy filing can best be done with the work lower to provide better leverage.

Correct pressure on the file varies with different materials, but in all cases the pressure should not be so light that the file merely slides over the work, as this will rapidly dull the file. On the other hand, unnecessarily heavy pressure will wear down the teeth more rapidly than warranted by the increased filing effect. Files should be released on the return stroke.

Files should be kept clean during use by frequently tapping the end on the bench to shake loose the filings or chips from the teeth, and by periodic cleaning with a file brush.

Files should never be placed in a drawer or among other tools, but should be kept separate either by hanging in a rack or placing in a slot in a file box. They should be kept dry to prevent rusting.

Files with wide, thin rectangular sections, such as Hand Files and Finishing Files, are adapted to general work, and should be moved with a slow, even, stroke along the work.

Files with small rectangular sections, such as Pillar Files and Square Files, are suitable for keyways, slots, etc.

Files with circular faces, such as Round Files, Half Round Files and Crossing Files, are best for enlarging holes, and should be rotated clockwise during the stroke for best results.

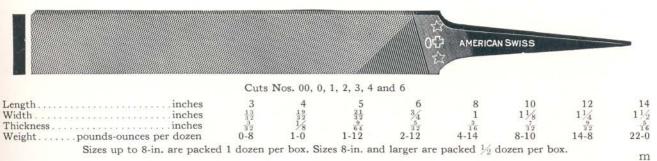
Files with especially thin sections, such as Warding Files and Equaling Files, are suitable for use in narrow spaces.

Files with narrow wedge sections, such as Knife Files, Three-Square Files, and Pippin Files, are for use where acute angles are to be filed.

Our Problem Department is always ready to offer definite recommendations for specific kinds of work.



HAND FILES



Rectangular section. Parallel in width, and tapered in thickness from about $\frac{1}{2}$ length of cut to end. Double cut on both flat sides, cut on one edge, and safe (uncut) on the other edge.

PILLAR FILES

Cuts	Nos. 00, 0,	1, 2, 3, 4 a	nd 6	AMERIC	an świss	Ass in	-
Length inches Width inches Thickness inches Weight pounds-ounces per dozen Sizes up to 8-in, are packed 1 dozen p	3 1/4 3/3/2 0-6	4 3/8 1/8 0-12	5 16 9 64 1-4	6 1/2 5/32 1-12	8 5/8 11 14 3-0	$ \begin{array}{r} 10 \\ \frac{3}{4} \\ \frac{7}{32} \\ 6-4 \end{array} $	$ \begin{array}{r} 12 \\ 1 \\ \hline 17 \\ \hline 64 \\ 10-5 \end{array} $

Rectangular section, narrower than Hand Files. Parallel in width, and tapered in thickness from about 1/2 length of cut to end. Double cut on both flat sides, and safe (uncut) on both edges.

NARROW PILLAR FILES

Cuts	Nos. 00, 0,	1, 2, 3, 4 a		2 g AMERICA	AN SWISS		
Length inches Width inches Thickness inches Weight pounds-ounces per dozen	$\begin{array}{c} 3 \\ \frac{3}{16} \\ \frac{5}{64} \\ 0-4 \end{array}$	$\begin{array}{c} 4 \\ \frac{7}{3} \\ \frac{7}{64} \\ 0-8 \end{array}$	5 14 18 0-10	$\begin{array}{c} 6 \\ \frac{9}{32} \\ 1/8 \\ 1-0 \end{array}$	8 3/8 3 16 2-0	$ \begin{array}{r} 10 \\ \frac{1}{2} \\ \frac{15}{64} \\ 4-2 \end{array} $	$ \begin{array}{c} 12 \\ 5 \\ 1 \\ 4 \\ 6-4 \end{array} $

Sizes up to 8-in, are packed 1 dozen per box. Sizes 8-in, and larger are packed ½ dozen per box.

Rectangular section, narrower than Pillar Files. Parallel in width, and tapered in thickness from about length of cut to end. Double cut on both flat sides and safe (uncut) on both edges.

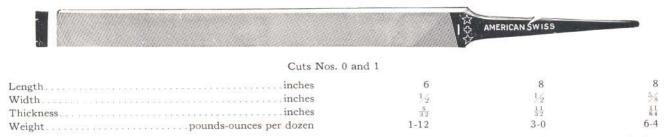
EXTRA NARROW PILLAR FILES

				3 € AMEF	PICAN SWISS	ar Sterrage	2
Length inches Width inches Thickness inches Weight pounds-ounces per dozen	$\begin{array}{c} 3 \\ \frac{5}{312} \\ \frac{3}{32} \\ 0-3 \end{array}$	1, 2, 3, 4 a 4 11 64 7 64 0-6 d 1 dozen p	$\begin{array}{c} 5 \\ \frac{3}{16} \\ 1/8 \\ 0-8 \end{array}$	$\begin{array}{c} 6 \\ \frac{7}{32} \\ \frac{1}{8} \\ 0-13 \end{array}$	$\begin{array}{c} 8 \\ \frac{5}{16} \\ \frac{5}{32} \\ 1-12 \end{array}$	$ \begin{array}{c} 10 \\ \frac{3}{8} \\ \frac{3}{16} \\ 2-10 \end{array} $	$\frac{12}{\frac{1}{2}}$ $\frac{7}{32}$ 5-0

Rectangular section, narrower than Narrow Pillar Files. Parallel in width and tapered in thickness from about ½ length of cut to end. Double cut on both flat sides and safe (uncut) on both edges.



PILLAR TESTING FILES



Rectangular section, similar to Pillar Files. Special form and style of extremely hard double-cut teeth for testing the hardness of tools or metals.

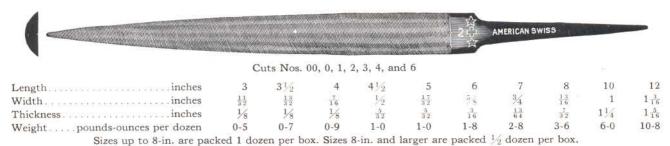
Additional Widths of Pillar Files

Cuts Nos. 00, 0, 1, 2, 3, 4 and 6

Lengthinches	3	4	5	6	8	10	12
Widthinches	1/8	1 1 6 4	136	1/8	1/4	3.8	1/2
	3.2	3	14	16	5 16	$\frac{1}{2}$	5/8
	3	3 2	$\frac{5}{16}$	$\frac{7}{32}$	3/8	5/8	3/4
		5 16	$\frac{7}{1.6}$	3.2	1/2		7/8
		38		5 16	5/8		
		1/2		$\frac{1}{3}\frac{1}{2}$	$\frac{3}{4}$		
				3/8			
				1/3			

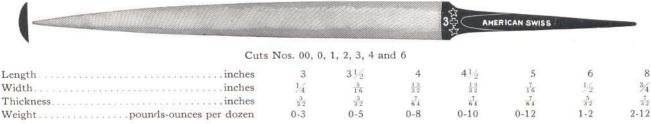
Sizes up to 8-in, are packed 1 dozen per box. Sizes 8-in, and larger are packed ½ dozen per box.

HALF ROUND FILES



Circular segment section. Tapered in width and thickness from about $\frac{1}{2}$ length of cut to a point. Double cut on both flat and half-round sides.

SLIM HALF ROUND FILES



Sizes up to 8-in. are packed 1 dozen per box. Size 8-in. is packed ½ dozen per box.

Circular segment section, smaller cross-section than Half Round Files. Tapered in width and thickness from about ½ length of cut to a point. Double cut on both flat and half-round sides.

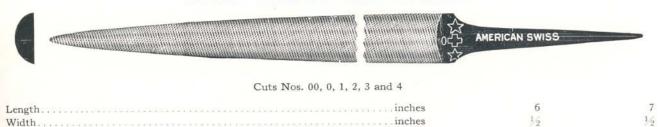
32

1-0

 $\frac{7}{32}$

1-4

HALF ROUND RING FILES



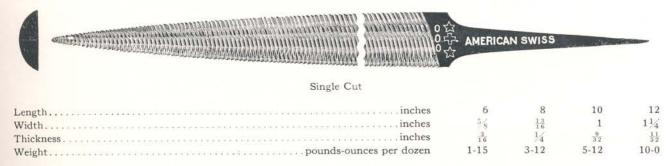
Both sizes are packed 1 dozen per box.

Weight pounds-ounces per dozen

Circular segment section, narrower and thicker than Half Round Files. Tapered in width and thickness from about ½ length of cut to a point. Double cut on both flat and half-round sides.

HALF ROUND FILES

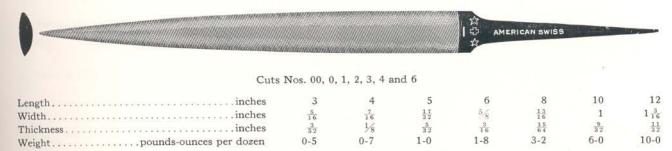
COARSE OPEN CUT FOR SOFT METALS



Size 6-in. is packed 1 dozen per box. Sizes 8-in. and larger are packed ½ dozen per box.

Circular segment section, similar to Half Round Files. Special coarse open single cut for soft metals. Tapered in width and thickness from about ½ length of cut to a point. Single cut on both flat and half-round sides.

CROSSING FILES

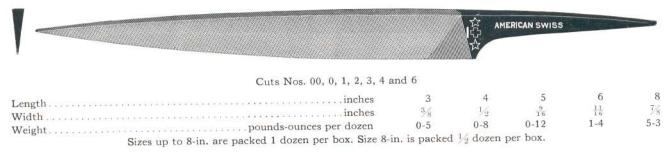


Sizes up to 8-in. are packed 1 dozen per box. Sizes 8-in. and larger are packed ½ dozen per box.

Double circular segment section, one side having the same radius as Half Round Files, and the other side having a larger radius or flatter curve. Tapered in width and thickness for one half the length to a point. Double cut on both sides.



KNIFE FILES



Long wedge section. Tapered in width and thickness from about $\frac{1}{2}$ length of cut to point. Double cut on both flat sides, single cut on edge and back.

WARDING FILES

Cuts Nos. 00, 0,	1, 2, 3, 4 a	nd 6	0 亞 A	MERICAN SV	/ISS	
The second secon	3	4	5	6	8	10
Length inches Width inches	3/8	1/2	9 16	5/8	3/4	1
Thickness B. & S. Gauge	18	14	13	11	10	8
Thickness	20	16	15	13		
	22	18	18	14		
		20		16		
Weightpounds-ounces per dozen	0-3	0-6	0-10	1-0	1-12	3-8

Sizes up to 8-in. are packed 1 dozen per box. Sizes 8-in. and larger are packed ½ dozen per box.

Rectangular section, extremely thin. Tapered in width from tang to point, and parallel in thickness. Double cut on both flat sides and on both edges.

EQUALING FILES

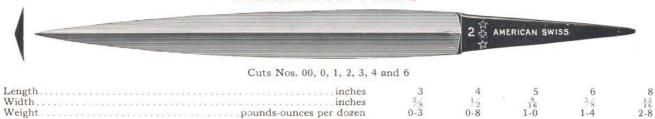
	0 ξ	AMERICA	N SWISS		-
Cuts Nos. 00, 0, 1, 2, 3, 4 a	nd 6				
Lengthinches	3	4	5	6	8
Widthinches	3/8	7 16	1732	$\frac{1}{3}\frac{9}{2}$	3/4
Thickness	18	16	13	10	10
Thickness	20	18	15	12	
				14	
Weightpounds-ounces per dozen	0-3	0-6	0-11	1-4	2-0

Sizes up to 8-in. are packed 1 dozen per box. Size 8-in. is packed ½ dozen per box.

Rectangular section, extremely thin. Parallel in width and in thickness from tang to end. Double cut on both flat sides and on both edges.



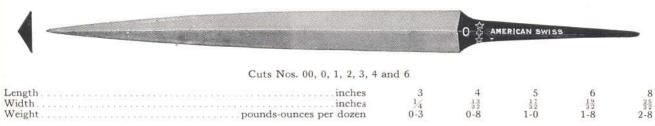
BARRETTE FILES



Sizes up to 8-in. are packed 1 dozen per box. Size 8-in. is packed ½ dozen per box.

Triangular section, with one side much wider than the other two. Tapered in both width and thickness from about $\frac{1}{2}$ length of cut to a point. Double cut on the wide flat side and safe (uncut) on both narrow beveled sides.

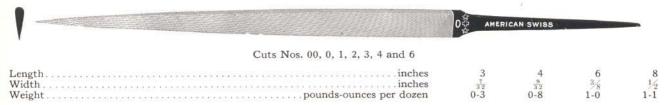
CANT FILES



Sizes up to 8-in. are packed 1 dozen per box. Size 8-in. is packed 1/2 dozen per box,

Triangular section, with one side somewhat wider than the other two. Tapered in both width and thickness from about $\frac{1}{2}$ length of cut to a point. Double cut on all three sizes and edges.

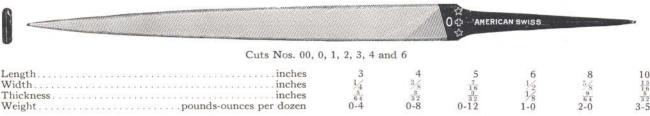
PIPPIN FILES



Sizes up to 8-in. are packed 1 dozen per box. Size 8-in. is packed ½ dozen per box.

Wedge section with round back, convex sides and sharp edge. Tapered in both width and thickness from about ½ length of cut to a point. Double cut all over. Sometimes called Appleseed Files.

CROCHET FILES



Sizes up to 8-in. are packed 1 dozen per box. Sizes 8-in. and larger are packed ½ dozen per box.

Rectangular section with round edges. Slightly tapered in thickness, and tapered in width from about ½ length of cut to a point. Double cut all over.



TAPER ROUND FILES

	C	uts Nos.	00, 0, 1,	2, 3, 4 an	d 6	0	公命公 AM	ERICAN SWISS		
Length inches Diameter inches Weight pounds-ounces per dozen	$2\frac{1}{2}$ $0-1$	3 64 0-2	3 ½ 7 64 0-3	$\frac{4}{\frac{5}{32}}$ 0-4	5 3 16 0-8	0.12	$\frac{8}{\frac{1}{3}\frac{1}{2}}$ 1-1	$\frac{10}{\overset{7}{16}}$	12 1/2 6-8	$\frac{14}{\frac{5}{8}}$ 11-8

Sizes up to 8-in, are packed 1 dozen per box. Sizes 8-in, and larger are packed ½ dozen per box.

Circular section. Tapered from about ½ length of cut to a point. Double cut.

PARALLEL ROUND FILES

					(소리슈 AM.	swiss		
	Cuts I	Nos. 00, 0), 2 and 4						
Length			4 1/8 0-4		$\frac{5}{\frac{5}{32}}$ 0-7		$ \begin{array}{c} 6 \\ 16 \\ 0-11 \end{array} $		8 1/4 1-8
Als	o made ir	the follo	wing dia	meters					
Diameter fraction of inches decimal of inches	$.062^{\frac{1}{16}}$	$.093^{\frac{3}{3}\frac{2}{2}}$.125	.156	$.187^{\frac{3}{16}}$	$.218^{\frac{7}{32}}$.250	$.312^{\frac{5}{16}}$	3/8 .375
Lengthinches	4	4	4	4	4	5	=		
		3	6	5	6	6	6	6	6
					8	8	8	8	8

Sizes up to 8-in. are packed 1 dozen per box. Size 8-in. is packed ½ dozen per box.

Circular section. Parallel from tang to end. Double cut. Sometimes called Round Straight Files.

SQUARE FILES

				0 <	ane ならた	RICAN SWISS		_
Cuts Nos.	00, 0, 1,	2, 3, 4 an	nd 6					
Lengthinches	3	4	5	6	8	10	12	14
Width and thicknessinches	3 2	1/8	16	$\frac{7}{32}$	3 2	$\frac{1}{3}\frac{1}{2}$	7 16	5/8
Weight pounds-ounces per dozen	0-2	0-4	0-8	0-12	2-0	3-12	7-0	13-8

Sizes up to 8-in, are packed 1 dozen per box. Sizes 8-in, and larger are packed ½ dozen per box.

Square section. Tapered on all four sides from about $\frac{1}{2}$ length of cut to a point. Double cut on three sides. Fourth side safe (uncut). Can also be furnished with four sides and edges cut.

THREE SQUARE FILES

Cuts Nos.	00, 0, 1,	2, 3, 4 an	d 6	☆	☆☆ AHERIC	AN SWISS		_
Length inches Width inches Weight pounds-ounces per dozen	$\frac{3}{\frac{5}{32}}$ 0-1	$3\frac{1}{2}$ $\frac{7}{32}$ 0-3	4 1/4 0-6	$ \begin{array}{c} 5 \\ \frac{11}{32} \\ 0-12 \end{array} $	6 3/8 1-4	8 1/2 2-12	10 5-8 5-0	$\frac{12}{\frac{3}{4}}$ 9-4

Sizes up to 8-in. are packed 1 dozen per box. Sizes 8-in. and larger are packed ½ dozen per box.

Triangular section, with three sides equal. Tapered from about $\frac{1}{2}$ length of cut to a point. Double cut on all three sides and edges.

"ONLY THE BEST ARE GOOD ENOUGH"



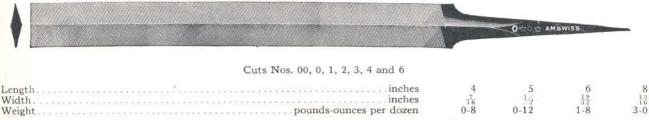
METAL SAW FILES

4			//O s	수☆ AMLEWIS	paragraph and a second	
Cuts Nos. 00, 0), 1, 2, 3, 4 a	und 6				
Length inches Width inches Weight pounds-ounces per dozen	3 1/8 0-2	$3\frac{1}{2}$ $\frac{3}{16}$ 0-4	4 3 ⁷ 2 0-8	$ \begin{array}{c} 5 \\ 16 \\ 1-0 \end{array} $	6 3 1-12	8 1/2 3-8

Sizes up to 8-in, are packed 1 dozen per box. Size 8-in, is packed ½ dozen per box.

Triangular section with the three sides equal. Parallel from tang to end. Double cut on all three sides and edges.

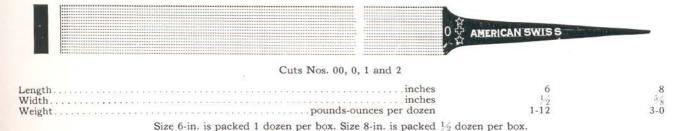
SLITTING FILES



Sizes up to 8-in. are packed 1 dozen per box. Size 8-in. is packed ½ dozen per box.

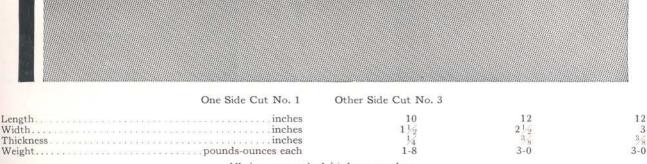
Flat diamond section. Parallel from tang to end. Double cut on all four sides and edges.

CHECKERING FILES



Rectangular section. Parallel in width and thickness from tang to end. Safe (uncut) on both edges and double cut on both flat sides. Cuts are at right angles to each other.

BENCH FILES



All sizes are packed ½ dozen per box.

Rectangular section. Parallel throughout the length. Has no tang. Different double cuts on each flat side, and safe (uncut) on the two edges.



SCREW HEAD FILES



· 合命介 AM SWISS

Length-3-in.

With Tang

Weight 3 oz. per dozen

Thin rectangular section, having two parallel sides with short bevels to form sharp edges. Parallel throughout the length. Furnished with or without tang. Safe (uncut) on flat sides, double cut on all four bevels. Principally used for clearing out and enlarging the heads of small screws in watches and jewelry.

COIL OR POINT FILES



Size $-3\frac{1}{2}$ -in. x $\frac{1}{4}$ -in. x $\frac{1}{32}$ -in.

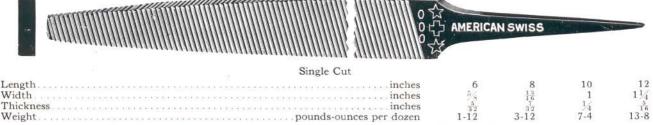
Cut No. 3

Weight-3 oz. per dozen

Narrow rectangular section. Parallel from handle to end. Double cut on the two flat sides and safe (uncut) on the two edges.

FLAT FILES

COARSE OPEN CUT FOR SOFT METAL



Size 6-in. is packed 1 dozen per box. Sizes 8-in. and larger are packed ½ dozen per box.

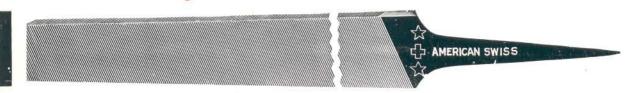
Rectangular section. Tapered on both width and thickness from about $\frac{1}{2}$ length of cut to a blunt point. Single coarse cut on both flat sides and both edges for soft metals.

FINISHING OR STRIPPING FILES



Rectangular section. Parallel on the width and tapered on the thickness. Large angle double cut on both flat sides and safe (uncut) on both edges.

SQUARE EDGE MILL FILES



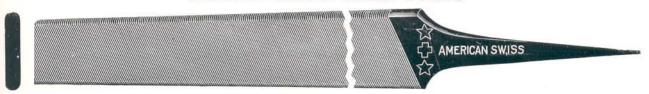
Single Cut

	Cut No. 00-Same as Bastard	Cut No. 1-	-Same as 2nd Cu	t	Cut No. 2-	Same as Si	mooth	
Length		inches	4	6	8	10	12	14
Width		inches	7.6	5 6	13	1	$1\frac{3}{16}$	13/8
Thickness		inches	3 2	1/8	3.2	736	32	1/4
Weight	pounds-oun	ces per dozen	0-12	1-6	3-0	5-6	8-12	13-12

Sizes up to 8-in. are packed 1 dozen per box. Sizes 8-in. and larger are packed ½ dozen per box.

Rectangular section. Parallel on the thickness, and slightly tapered on the width. Single cut on both sides and on both edges.

ROUND EDGE MILL FILES

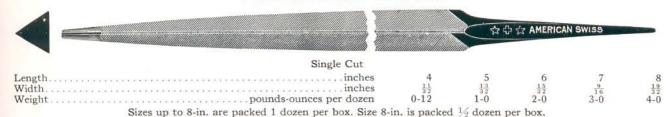


Single Cut

Cut No. 00-Same as Bastard	Cut No. 1-Same as	2nd Cut Cut No	. 2-Same as Smooth	
Length	inches	8	10	12
Width		1.3	1	$1\frac{3}{16}$
Thickness		32	3 16	$\frac{7}{32}$
Weight pounds-ound	es per dozen	2-10	5-5	8-5
All	sizes are packed 1/2 do.	zen per box.		

Rectangular section with two rounded edges. Parallel on the thickness, and slightly tapered on the width. Single cut on both flat sides and both round edges.

TAPER SAW FILES



Triangular section with the three sides equal. Tapered from about $\frac{1}{2}$ length of cut to a blunt point. Single cut on all three sides and edges to near the point and tapered to a blunt point.

SLIM TAPER SAW FILES



Triangular section with the three sides equal, and somewhat narrower than Taper Saw Files. Tapered from about ½ length of cut to a blunt point. Single cut on all three sides and three edges to near the point. Principally used for filing saws.



EXTRA SLIM TAPER SAW FILES

1				会合合 AMERIC	AN SWISS	
	Single Cut					
Width	pounds-ounces		$\frac{5}{\frac{7}{32}}$ 0-8	6 14 0-9	$\frac{7}{\overset{6}{\overset{3}{3}\overset{2}{2}}}$ 1-0	$ \begin{array}{c} 8 \\ \frac{1}{3} \frac{1}{2} \\ 1-12 \end{array} $
	Sizes up to 8-in. are packed 1 dozen per box. Size	8-in. is packed	d ½ dozen	per box.		

Triangular section with the three sides equal and narrower than Slim Taper Saw Files. Tapered from about ½ length of cut to a blunt point. Single cut on all three sides and three edges to near the point. Principally used for filing saws.

ROUND EDGE JOINT FILES

		12 ♣ A	MÉRICAN SWIS	S	
	ananan masanan	The state of the s			
Cuts Nos. 0 and 2					
ength inches	3	4	5	6	. 8
Vidth inches	3/8	7	1/2	9	3/4
Thickness B. & S. Gauge	14	9	11	10	8
The state of the s	16	to	13	12	10
	18	26	15	14	12
	20		18	16	
Veight pounds-ounces per dozen	0.4	0-8	0-12	1 2	1.4

Thin rectangular section, with two rounded edges. Parallel in width and thickness from tang to end. Double cut on both edges only, and safe (uncut) on the two flat sides.

SQUARE EDGE JOINT FILES

]2₹ A	MERICAN SWISS	N WHITE	
Cuts Nos. 0 and 2					
Length inches	3	4	5	6	8
Width	3/8	$\frac{7}{16}$	$\frac{1}{2}$	16	3/4
Thickness B. & S. Gauge	16	14	11	10	8
	18	16	13	12	10
		18	15	14	12
		20		16	
Weightpounds-ounces per dozen	0-4	0-8	0-12	1-3	1-4

Thin rectangular section. Parallel in width and thickness from tang to end. Double cut on both edges only, and safe (uncut) on the two flat sides.

PIVOT FILES



Length-3-in.

Single Cut

Weight-7 oz. per dozen

Rhomboid section, with opposite sides and edges parallel and equal, and with two obtuse angles and two acute angles. Parallel in width and thickness from tang to end. Both flat sides and both edges have single cut, right hand or left hand. Principally used by clockmakers.

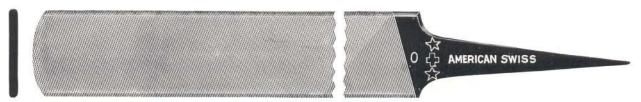
BROACH FILES

Length-3 in.

Twist Drill Gauge 40-65

Circular section of very small drill gauge. Parallel from tang to end. Double cut.

FORK FILES



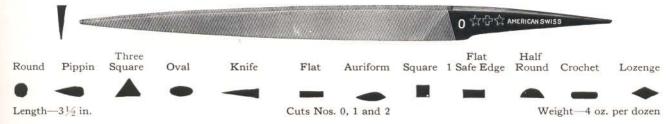
Cuts No. 0 and 2

Lengthinches	6
Width	7.8
Thickness B. & S. Gauge	12
Weight pounds-ounces per dozen	1-8

Packed 1 dozen per box.

Rectangular section, with rounded edges. Parallel in width and thickness from tang to end. Double cut on both flat sides and both edges.

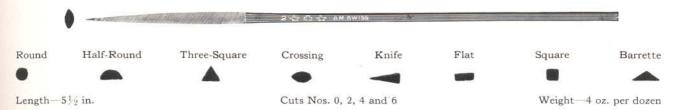
DIE SINKERS' FILES



Twelve different sections and shapes similar in form to longer files of corresponding names. Can be furnished in assorted sets. Principally used to dress and finish dies of all kinds.

ESCAPEMENT FILES

Square Handles

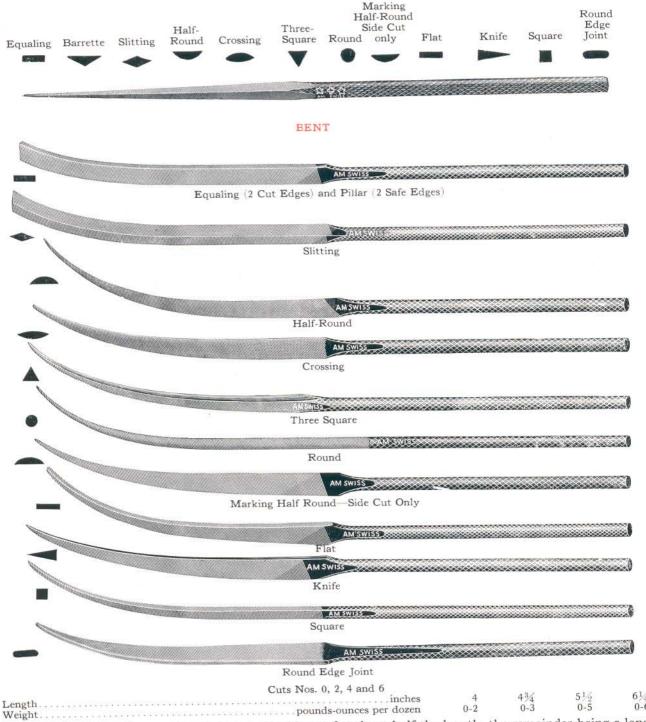


Eight different sections and shapes. Double cut for a small part of the length, the remainder being a long square handle. Can be furnished in assorted sets. Principally used by jewelers, clockmakers and watch makers. Also known as Square Handle Needle Files.



REGULAR NEEDLE FILES

Round Knurled Handle



Twelve different sections and bent shapes. Double cut for about half the length, the remainder being a long round knurled tang or handle. The knurled handle, which was first used by the American Swiss File & Tool Co., prevents slippage, and assures a firm grip without cramping the fingers and hand of the user. These files can be furnished in assorted sets supplied in attractive boxes, as shown on Page 31, with each file separated from every other. Principally used by die makers, jewelers, watch makers and fine tool makers.

PARALLEL MACHINE FILES

SIZE A



Pillar Equaling Three Cant
2 Safe Edges Cut 4 Sides Square Cut 3 Sides

Lozenge

Knife

Round

Round

Oval

Pippin

Crochet

Square

Length Overall-31/4 in. Length at Cut-21/4 in.

Cuts Nos. 00, 0 and 2 Cut on the Downward Stroke

Shank-1/4 in. dia. Weight-7 oz. per dozen

SIZE B



Pillar Equaling 2 Safe Edges Cut 4 Sides

Three Square

Cant Cut 3 Sides

Lozenge

Knife

Round

Half-Round

Oval

Pippin

Crochet

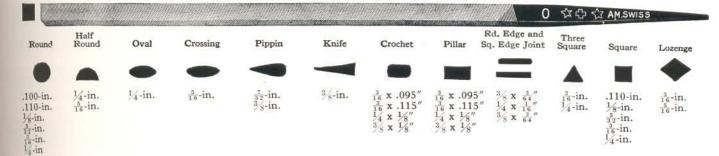
Square

Length Overall-314 in. Length of Cut-21/4 in.

Cuts Nos. 00, 0 and 2 Cut on the Downward Stroke

Shank-1/8 in. dia Weight-3 oz. per dozen

SIZE C



Length Overall-7 in. Length at Cut-5 in.

Cuts Nos. 00, 0 and 2 Cut on the Upward Stroke

Weight-8 oz. per dozen

SIZE D



Pillar Equaling 2 Safe Edges Cut 4 Sides

Three Square Cut 3 Sides

Lozenge

Knife

Round

Half-

Oval

Pippin

Crochet Square

Length Overall-43/4 in. Length of Cut-312 in.

Cuts Nos. 00, 0 and 2 Cut on the Downward Stroke

Shank $-\frac{5}{16}$ in. dia. Weight-14 oz. per dozen

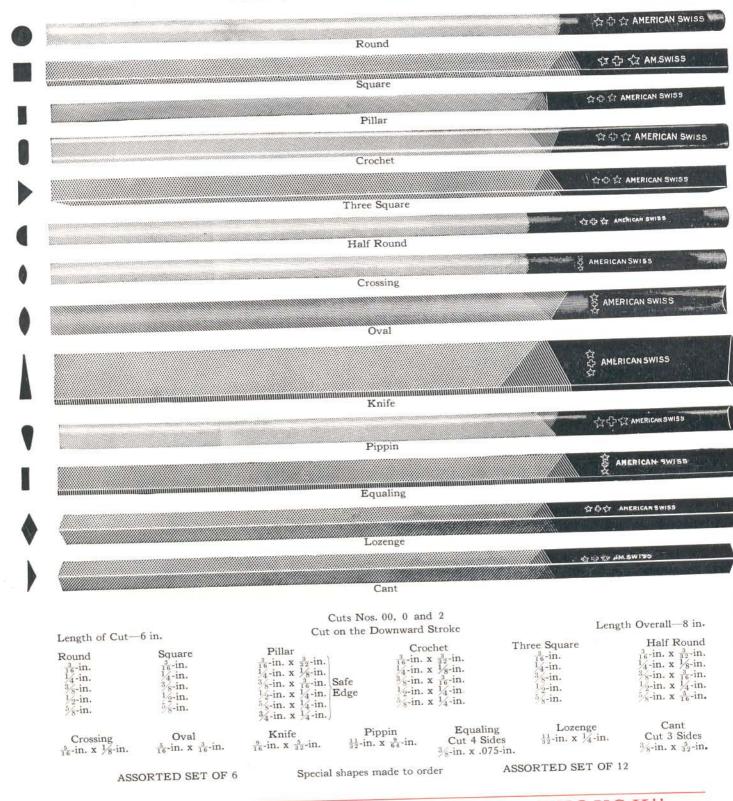
Twelve different sections. All shapes have parallel sides and edges throughout the filing length. Double cut, and furnished with tang or shank for filing machines. Sizes A and B can be furnished in assorted sets of 6 or 12, supplied in attractive boxes, as shown on Page 31, with each file separated from every other to prevent marring of the teeth and to permit selection of the desired shape at a glance.



PARALLEL MACHINE FILES

SIZE E

For Oliver, Cochrane-Bly and Similar Filing Machines





DIE SINKERS' RIFFLERS

\$≥ © \$ LAMERUGS	
DS 1	OTHOUSAND
◇다숙2·IM-SWISS	the
DS 2	Me .
• दी दी दे 3 am. swips	
DS 3	
会 中女4 AM SW/AS	
DS 4	
会合金5 AM. BWISS DS 5	
	r.
☆☆ GAM-SWISS DS 6	
☆ ☆ ☆ 7 AM-SWI6S	OF STORY
DS 7	
☆ 『中 ☆ 8 AM.SWIGS	
DS 8	
会に3 g 9 AM.6wss	
DS 9	_
☆유수 10 AMSWISS	
DS 10	-
会中会IIAM.5WISS	
DS 11	
☆ C2 ☆ 12 AM.SWISS	
DS 12	
· 숙주성 I3 AM SWISS	
DS 13	
숙구 및 14 AM.Swi6S DS 14	
	2227/4/
安 号 安 I 5-AM. SWISS DS 15	
수익 약 16 AM.SWISS	-
DS 16	
☆エン会 17 AM SWISS	1
DS 17	
大中日 计 18 AM SWIPS	
DS 18 Cuts Nos. 0, 2 and 4	
Length, approximate	7
Weightpounds-ounces per dozen 0-4 0-5	0-8

Always order these rifflers by the designations given above

Long straight safe (uncut) middle portion for hand hold, with cut ends in 18 different shapes and sections. Slender stock and narrow ends. Can be furnished in assorted sets of 18. Used principally by die sinkers, jewelers and instrument manufacturers.



SILVERSMITHS' RIFFLERS



Length-7½-in.

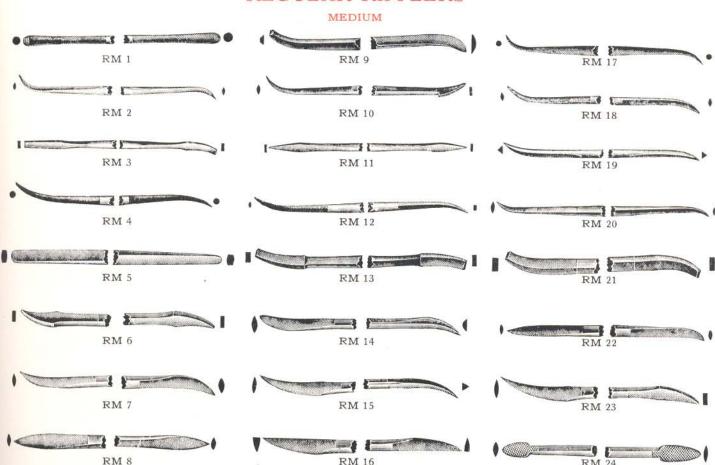
Cuts Nos. 0 and 2 Always order these rifflers by the designations given above

Weight-12 oz. per dozen

Longer section and wider ends than Die Sinkers' Rifflers, with long straight safe (uncut) middle portion for hand hold, and cut ends in 12 different shapes and sections. Can be furnished in assorted sets of 12. Used principally by silversmiths and in making glass moulding dies, etc.

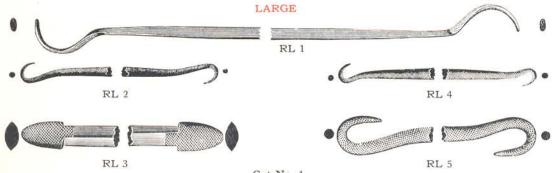
RM 24

REGULAR RIFFLERS



Cut No. 4 Cuts 0-2-6 made to order Approximate Length Overall-6-in. Always order these rifflers by the designations given above

RM 16



Cut No. 4 Cuts 0-2-3 made to order Approximate Length Overall-61/2-in. Always order these rifflers by the designations given above

Somewhat similar in shapes and proportions to Regular Die Sinkers' Rifflers, shown on Page 23, having long straight safe (uncut) middle portion for hand hold, with cut ends in a large number of different sections. Used by die sinkers, jewelers, silversmiths, sculptors, etc. Made up on order only.

Made up on order only.



Cut No. 1 Always order these rifflers by the designations given above Approximate Length Overall-8-in. Somewhat similar in shapes and proportions to Regular Silversmiths' Rifflers, shown on Page 24, but larger, with long straight safe (uncut) middle portion for hand hold, and cut ends in 12 different shapes and sizes.

DIE MAKERS' RIFFLERS DM 1 DM 2 DM 3 DM 4 DM 5 DM 6 DM 7 DM 8 DM 9

Cuts Nos. 0, 1 and 2

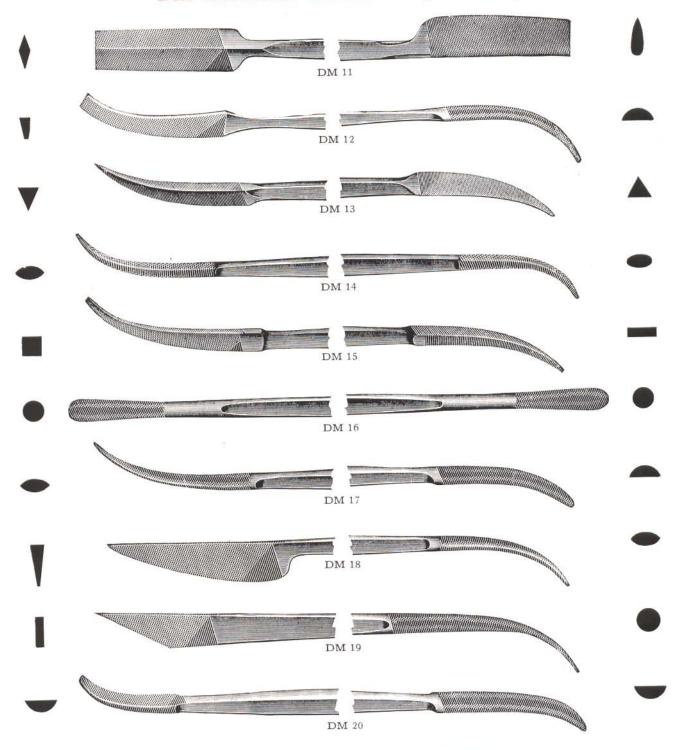
DM 10

Approximate Length Overall-67/8-in.

Always order these rifflers by the designations given above

Somewhat similar in shapes and sizes to Die Sinkers' Rifflers, shown on Page 23, but with larger and heavier sections. Have straight safe (uncut) middle portion for hand hold, and cut ends in a large variety of shapes and sections. Made up on order only.

DIE MAKERS' RIFFLERS (Continued)

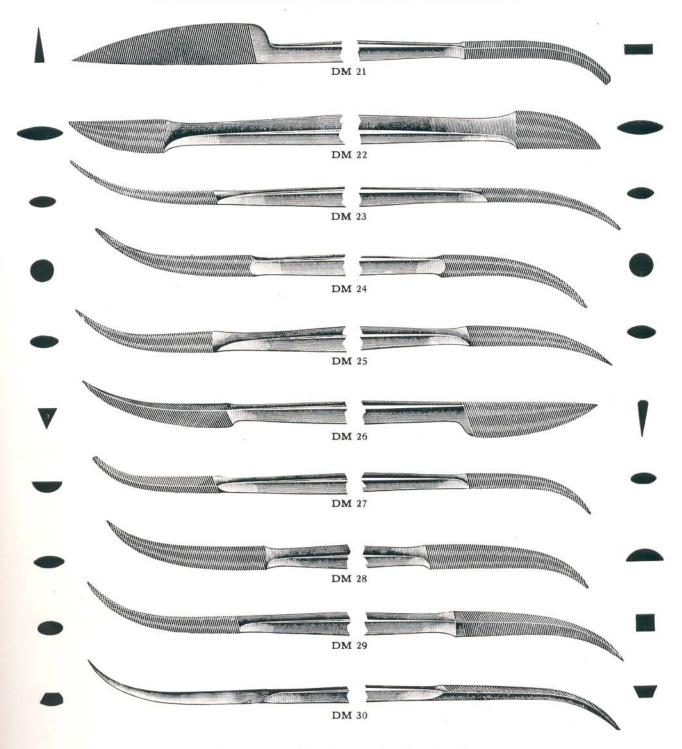


Always order these rifflers by the designations given above

Somewhat similar in shapes and sizes to Die Sinkers' Rifflers, shown on Page 23, but with larger and heavier sections. Have straight safe (uncut) middle portion for hand hold, and cut ends in a large variety of shapes and sections. Made up on order only.



DIE MAKERS' RIFFLERS (Continued)



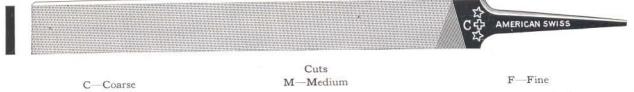
Always order these rifflers by the designations given above

Somewhat similar in shapes and sizes to Die Sinkers' Rifflers, shown on Page 23, but with larger and heavier sections. Have straight safe (uncut) middle portion for hand hold, and cut ends in a large variety of shapes and sections. Made up on order only.

"ONLY THE BEST ARE GOOD ENOUGH"



CORRUGATING FILES



C—Coarse	M—Medium	r—rme	
Width		inches	$ \begin{array}{r} 6 \\ \frac{3}{4} \\ \frac{5}{32} \\ 2-12 \end{array} $

Rectangular Section. Parallel in width and tapered in thickness from about ½ length of cut to end. Double cut on both flat sides and safe (uncut) on both edges. Principally used for producing corrugations on shears, knives and kindred tools.

AUGER BIT FILES



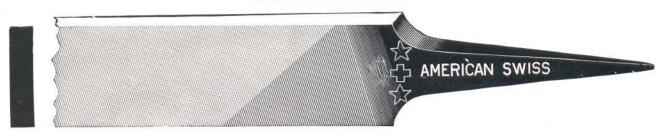
Length-7 inches

Cut No. 1

Weight-14 ounces per dozen

Rectangular Section. Filing surface at each end and handle in middle. Single cut on flat sides at one end and on edges at the other end. Principally used to sharpen auger bits.

DOCTOR FILES



Cut-30 teeth per inch

inches	14
Lengthinches	11/9
Width inches	3/8
Thickness	2-3
Thickness	20

Rectangular Section. Parallel in width and thickness from tang to end. Double cut on both flat sides and safe (uncut) on both edges. Principally used to true up the straight edge of Doctor blades on print rolls, etc.

"ONLY THE BEST ARE GOOD ENOUGH"

This has been our motto for over 40 years and refers to the distribution as well as the fabrication of "American-Swiss" Swiss-Pattern Files of Precision.

BUY FROM OUR DISTRIBUTOR

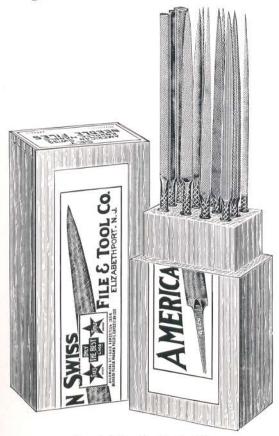
Distributors serve you promptly and economically.

"ONLY THE BEST ARE GOOD ENOUGH"

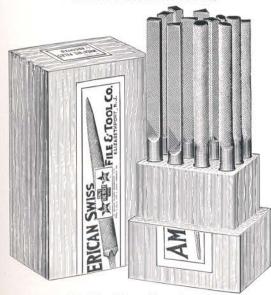


BOXES SUPPLIED FOR "AMERICAN SWISS" SWISS-PATTERN FILES

These boxes are attractive and sturdy. They are furnished with needle files, and sizes A and B machine files when ordered in sets of assorted shapes. Each file is held in its individual hole in the base, thereby preventing marring or bruising of the teeth, and also permitting immediate recognition and selection of the desired file.



Knurled Handle Needle Files



Machine Files-Sizes A and B





"AMERICAN SWISS" Mechanics' Hand Tools and Knurls

BRASS PLUMB BOBS



Stock Sizes 4, 6, 8, 10, 12, 14, 16, 18 and 24 oz. ONE IN A BOX



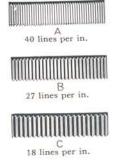


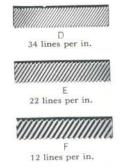


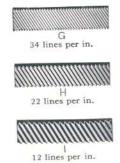
KNURLS

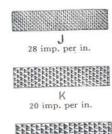
Made of Special Alloy Tool Steel Best Suited for this Type of Tool

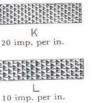
Patterns and Designs



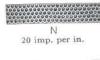


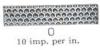












We manufacture a line of mechanics' hand tools in addition to our famous "American Swiss" Swiss-Pattern Files of Precision

LIST PRICES PER DOZEN

"AMERICAN SWISS" SWISS-PATTERN FILES

FILES OF PRECISION



MADE IN U. S. A.

AMERICAN SWISS FILE & TOOL CO.

410-416 TRUMBULL ST.

ELIZABETH, N. J.

By authorization of the O. P. M., this list comprises all the shapes, sizes and cuts of files that we will regularly carry in stock during the present emergency. Items previously listed will be considered as specials and can only be supplied for defense requirements, subject to steel on hand or our ability to get same, and subject to special prices. Files 6" and smaller are packed 1 dozen to a package.

Files 8" and larger are packed ½ dozen to a package.

Add 10% for broken packages.

Page Nos. refer to our main Catalog.

Page 9				HA	ND				SE MONTH
Inches	3		4	6	8		10	12	14
Size	13/2×3/32		x½ .70	3/4 x 5/32 \$4.90			1½x½ \$9.30	1½x9/2 \$12.30	1½x5/6 \$15.50
Cut # 00 & 0 # # 1 & 2	\$3.70 3.90		.90	5.40			10.40	13.80	17.40
" # 3	4.30		.30	6.30			11.50	20.00	27.10
" # 4	4.30	4	.30	6.30			11.50	15.40	19 40
# # 6 Weight, lboz., per doz.	0-8		1-0	7.60 2-12	9.9		8-10	14-8	22-0
Page 9	Water Control		-	PIL	I AP	- 57V1	CARR		
Inches	3	4	6		3 10	12	1		
Size	1/4×8/2	8/8×1/8	1/2x5/82		11/64 3/4 x7/85	1x17/64	1		
Cut # 00 & 0	\$3.00	\$3.00	\$3.40		.80 \$6.60	\$9.00			
" # 1 % 2	3.10	3.10	3.70		.20 7.00	9.80			
" # 3	3.40	3.40	4.30		.00		0.0		
/# T	3.40	3.40	4.30	6	.00 8.40	11.20	1		
" # 6 Weight, lboz., per doz.	0-6	4.30 0-12	1-12		3-0 6-4	10-5	F	or addition	al
Page 9		Of The Park	NA	RROW	PILLAR	TE.	H	ridths of the	
				Manager Commission		1 - 020	1	Pillar Files	CHAIR .
Inches	3	4	6	. 8	10	12	1 1 1 1 1 1 1 1		
Size	8/8×5/64	782×764	9/2×1/8	3/8X		5/8×1/4	\ (ot	her than P	illar
Cut # 00 & 0 # # 1 & 2	\$3.00 3.10	\$3.00 3.10	\$3.40 3.70	\$4.8		\$9.00 9.80	1		
** \$ 3	3.40	3.40	4.30	6.0		9.00	1	Testing)	
u # 4	3.40	3.40	4.30	6.0		11.20	1		
« # 6	4.30	4.30	5.30	A HAVE !					
Weight, lboz., per doz.	0-4	0-8	1-0	2	-0 4-2	6-4		See Catalog	3.
Page 9		1000	EXTRA	NAR	ROW PILL	AR	A	Page 10	water.
Inches	3	4	6	8	10	12	EXCL	ISIVE Ag	ents
Size	5/82×3/32	11/64×7/64	7/2×1/8	5/16X5		½x7/8			-
Cut #00 & 0	\$3.00	\$3.00	\$3.40	\$4.8		\$9.00	SH	ΔW & [
" # 1 & 2	3.10	3.10	3.70	5.2		9.80	9111	444 ~ F	
" # 3	3.40	3.40	4.30	6.0		51-51			1
75	3.40	3.40	4.30	6.0	00 8.40	11.20	1320	SANTA FE	AVE.
Weight, lboz., per doz.	4.30 0-3	4.30 0-6	5.30 0-13	1-1	2 2-10	5-0		NGELES, CA Ucker 1201	ALIF. S
AA CIBITC' ID. ON' Der don'						0 4			
	HALF	ROUND		1					
	3	ROUND 4	6	8	Page 10 Inches	PILI	AR TES		8 9
Page 10 SLIM Inches	3 1/4x8/2	4 13/2×7/64	1/2×5/82	3/4× 7/32	Page 10 Inches	PILL	AR TES	TING 8	
Page 10 SLIM Inches	3 1/4x8/2 \$4.20	4 13/2×7/4 \$4.80	\$6.20	$\frac{3}{4}x\frac{7}{32}$ \$9.00	Page 10	PILL	AR TES	TING	8 5/8×11
Page 10 SLIM Inches Size Cut #00 % 0	3 14x3/2 \$4.20 4.70	4 13/2×7/4 \$4.80 5.70	\$6.20 7.20	3/4 x $\frac{7}{32}$ \$9.00 10.30	Page 10 Inches	PIL	AR TES 6 1/2×3/2	TING 8 ½x ¹¹ / ₃₂	5/8×11
Page 10 SLIM Inches Size Cut #00 & 0. # 1 & 2 # 3 & 4	3 14x3/2 \$4.20 4.70 5.60	4 13 ₆₂ x7 ₆₄ \$4.80 5.70 6.50	1/2x5/2 \$6.20 7.20 8.20	$\frac{3}{4}x\frac{7}{32}$ \$9.00	Page 10 Inches	PIL	AR TES	TING 8	
Page 10 SLIM Inches Size Cut #00 % 0	3 14x3/2 \$4.20 4.70	4 13/2×7/4 \$4.80 5.70	\$6.20 7.20	3/4 x $\frac{7}{32}$ \$9.00 10.30	Page 10 Inches	PIL	AR TES 6 1/2×3/2	TING 8 ½x ¹¹ / ₃₂	5/8×11
Page 10 SLIM Inches	3 14x ³ / ₂ \$4.20 4.70 5.60 7.00	4 13,2x7,4 \$4.80 5.70 6.50 8.00	\$6.20 7.20 8.20 10.50 1-2	34x \frac{7}{32} \\ \\$9.00 \\ 10.30 \\ 11.70 \\ 2-12 \end{align*} IALF	Page 10 Inches	PIL	AR TES 6 1/2x 5/3 \$4.40 1-12	8 1/2x 1/2 \$5.80 3-0	5/8×11 \$5.80
Page 10 SLIM Inches	3 14x3/2 \$4.20 4.70 5.60 7.00 0-3	4 13/21/4 \$4.80 5.70 6.50 8.00 0-8	½x5½ \$6.20 7.20 8.20 10.50 1-2	34x 7/32 \$9.00 10.30 11.70 2-12	Page 10 Inches	PILI	AR TES 6 1/2x 5/32 \$4.40 1-12	8 1/2×1/2 \$5.80 3-0	5/8×11/64 \$5.80 6-4
Page 10 SLIM Inches Size Cut #00 & 0	3 14x3/2 \$4.20 4.70 5.60 7.00 0-3	4 13/2×7/4 \$4.80 5.70 6.50 8.00 0-8	1/2x5/2 \$6.20 7.20 8.20 10.50 1-2	34x \frac{7}{32} \\$9.00 \\ 10.30 \\ 11.70 \\ 2-12 \\ IALF \] 5 17\(\pi x^5 \)	Page 10 Inches	PILI	AR TES 6 1/2x 5/2 \$4.40 1-12	8 1/2x 1/2 \$5.80 3-0 10 1x 1/4	5/8×11/4 \$5.80 6-4 12 18/6×5/6
Page 10 SLIM Inches Size Cut #00 & 0 # # 1 & 2 # # 3 & 4 # # 6 Weight, lboz., per doz. Page 10 Inches Size Cut #00 & 0	3 14x3/2 \$4.20 4.70 5.60 7.00 0-3	4 13/2×7/4 \$4.80 5.70 6.50 8.00 0-8	1/2 x 5/2 \$6.20 7.20 8.20 10.50 1-2	34x \frac{7}{32} \\$9.00 \\ 10.30 \\ 11.70 \\ 2-12 \\ IALF \] 5 17\(\pi x \\$5.90 \\ \$5.90	Page 10 Inches	PILI z., per doz.	AR TES 6 1/2x 5/2 \$4.40 1-12 8 8 1/2x 1/2 \$10.00	8 1/2×1/2 \$5.80 3-0 10 1x/4 \$13.30	5/8×1/4 \$5.80 6-4 12 13/6×5/6 \$17.20
Page 10 SLIM Inches Size Cut #00 & 0 # # 1 & 2 # # 3 & 4 # # 6 Weight, lboz., per doz. Page 10 Inches Size Cut #00 & 0 # 1 & 2	3 14x3 \$4.20 4.70 5.60 7.00 0-3 3 112x1 \$4.50 5.00	4 13½x744 \$4.80 5.70 6.50 8.00 0-8	\$6.20 7.20 8.20 10.50 1-2	34x \frac{7}{32} \ \$9.00 \ 10.30 \ 11.70 \ 2-12 \end{align*} IALF 5 \ 17 \(\times \) \ \$5.90 \ 7.00 \ \ \ 7.00 \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	Page 10 Inches	PILI z., per doz.	AR TES 6 1/2x 5/2 \$4.40 1-12 8 8 13/6x 7/2 \$10.00 11.30	8 1/2x 11/2 \$5.80 3-0 10 1x 1/4 \$13.30 14.60	5/8×1/4 \$5.80 6-4 12 13/6×5/6 \$17.20
Page 10 SLIM Inches Size Cut #00 & 0 # # 1 & 2 # # 3 & 4 # # 6 Weight, lboz., per doz. Page 10 Inches Size Cut #00 & 0	3 14x3/2 \$4.20 4.70 5.60 7.00 0-3 11/2x1/5 \$4.50 5.00 5.90	4 13/2x7/4 \$4.80 5.70 6.50 8.00 0-8	\$6.20 7.20 8.20 10.50 1-2 H	3/x \frac{7}{32} \\$9.00 \\ 10.30 \\ 11.70 \\ 2-12 \\ IALF \] 5 17/x x \{5} 17/x x \{5} 7.00 \\ 8.10	Page 10 Inches	PILI z., per doz.	AR TES 6 1/2x 5/2 \$4.40 1-12 8 8 13/6x 1/2 \$10.00 11.30 12.70	8 1/2x 1/2 \$5.80 3-0 10 1x 1/4 \$13.30 14.60 16.80	5/8×1/64 \$5.80 6-4 12 13/6×5/6 \$17.20 18.40
Page 10 SLIM Inches Size Cut #00 & 0. " # 1 & 2. " # 3 & 4. " # 6. Weight, lboz., per doz. Page 10 Inches Size Cut #00 & 0. " # 1 & 2. " # 3 & 3.	3 14x3 \$4.20 4.70 5.60 7.00 0-3 3 112x1 \$4.50 5.00	4 13/2x7/4 \$4.80 5.70 6.50 8.00 0-8	\$6.20 7.20 8.20 10.50 1-2	34x \frac{7}{32} \ \$9.00 \ 10.30 \ 11.70 \ 2-12 \end{align*} IALF 5 \ 17 \(\times \) \ \$5.90 \ 7.00 \ \ \ 7.00 \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	Page 10 Inches	PILI z., per doz.	AR TES 6 1/2x 5/2 \$4.40 1-12 8 8 13/6x 7/2 \$10.00 11.30	8 1/2x 11/2 \$5.80 3-0 10 1x 1/4 \$13.30 14.60	5/8×14 \$5.80 6-4 12 13/6×5/6 \$17.20



Page 11 HALF R	OUND RING	7	Page 11		LF ROUN		
Size	\$10.00 11.30 12.70	\$10.00 11.30 12.70 1-4	Size	%2 	8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	10 1x ⁹ / ₈₂ 80 \$15.00	12 1½x ¹ ½ \$19.00 10-0
Page 11 Inches	3 5/6×3/4 \$5.20 5.60 6.40 7.80 0-5		CROSSING 4 1/6x 1/8 \$5.60 5.20 7.20 9.00 0-7	6 5/8×3/6 \$7.60 8.60 9.80 12.00 1-8		8 1 ¹ / ₁₆ x ¹ / ₁₆ \$11.30 12.40 13.80 3-2	10 1x ⁹ / ₅₂ \$15.00 16.40 19.00
Page 12 Inches Width Cut \$ 00 & 0	3 3/8 \$4.00 4.40 4.80 0-5	\$4	KNIFE 4 1/2 1.40 5.00 5.00 5.60 0-8	5 %6 \$4.80 5.60 6.60 0-12	\$	6 6.00 7.00 7.00 8.00 8.00	8 78 \$8.60 9.80 9.80 11.40 11.40 5-3
Page 12	WARDING	ymenyjti <u>zasta</u>		Page 12	EQUA	LING	
	8 1/2 1/6	5.30	8 10 \$4 1 \$6.20 \$8.20 6.90 9.50 8.10	3 3/8 \$3.20 3.50	4 7 ₁₆ \$3.60 4.00	6 19 ₅₂ \$4.40 4.90	\$ \$6.00 6.60
	30 4.10 5.10		8.10 11.50	3.90	4.40 5.40	5.60	7.60
Thick. B.&S. Gauge """ """ """ """ """ """ """	18 14 13 20 16 15 22 18 18 20	13 14 16	10 8	18 20	16 18 20	10 12 14	10
Weight, lboz., per doz.	0-3 0-6 0-10 OTHER GAUGE		1-12 3-8 AL	0-3 ALI	0-6 OTHER C	1-4 AUGES SPECI	2-0 AL
Page 13	BARRETTI	2	Pa	ge 13	CANT		
Inches	3 4 \$\frac{1}{2}\$ \$5.00 \$5.50 5.10 5.60 5.30 5.80 0-3 0-8	6 5/8 \$6.60 7.00 7.60 1-4	18/6 Wid \$8.60 Cut 9.20 " 10.00 "	nes th# 00 & 0# # 2# # 4 ght, lboz., per d	\$6.70 7.50 8.80	\$7.70 8.60 10.00 1-8	8 25/52 \$9.70 10.60 12.00 2-8
Page 13 P	IPPIN	1	Page 13	CRO	CHET		
Inches	4 6 %3	8 ½ \$10.00 10.60 11.40 1-1		1/4×5/4 \$4.50 4.80	4 3/8x3/62 \$5.00 5.40 6.00 6.00 0-8	6 8 1/2x1/8 5/8x9/4 \$6.80 \$9.60 7.40 10.40 8.20 11.20 8.20 11.20 1-0 2-0	10 18/6x5/2 \$12.80 13.80 14.80 3-5
Page 14 Inches	3 54 \$2.50 2.70	4 5/2 \$2.80 3.00	TAPER RC 5 3/6 \$3.40 3.70	6 8 7/2 11/2 \$4.00 \$5.8 4.40 6.2			14 5/8 \$12.60 14.40
" # 3	2.90 2.90	3.20 3.20	4.00 4.00	4.80 6.60 4.80 6.60		13.70	17.50
Weight, lboz., per doz	3.20 0-2	3.60 0-4	4.40 0-8	5.20 0-12 1-	1 4-0	6-8	11-8
Page 14 Inches Diam Cut # 00 & 0 " # 2 " # 4 Weight, lboz., per doz	\$2.80 3.00 3.20	\$3. \$3. 4.	62 3/16	8 14 \$6.70 7.40 8.20 1-8		Catalog Page other diamete	



		e de la companya de l					
	3 4	SQUA 6	8		10	12	14
Cut # 00 & 0 \$3	32 1/8 3.40 \$3.80 3.50 4.00	\$5.00 5.40	\$6. 6.	00 \$	7.40 9.00	3/6 \$8.80 11.20	\$\frac{8}{8} \$12.00 15.40
" # 3	.60 4.40 .60 4.40	6.20 6.20	8. 8.	40 40 1	0.80	14.00	17.40
	0-2 0-4	0-12	10.04	2-0	3-12	7-0	13-8
Page 14 Inches	3 4	THREE S	SQUARE 5	6		8	10
Width	\$2 .90 \$3.9	90	\$4.30	3/8 \$4.80		\$6.20	5/8 \$8.40
* # 34	.20 4.2 .50 4.3 .50 4.3	50	4.70	5.20 5.90 5.90		6.80 7.60	9.10
	.50 4.5 0-1 0		5.20 0-12	1-4		7.60 2-12	10.40 5-0
Page 15	METAL SAW			Page 15	SLITTII	NG .	
Width	8 7/82	5 6 16 3/8	1/2	InchesWidth		4 7/16	6 19/82
" # 2 4	.20 4.20 4	.30 \$4.80 .70 5.20	6.80		200000000000000000000000000000000000000	\$5.60 6.60	\$8.80 10.00
" # 4 4		.20 5.90 1-0 1-12	7.60 3-8	" # 4 Weight, lboz.	, per doz	7.60 0-8	11.20 1-8
Page 15 CHECKERIN	G Page 15	BENCH		Page 16 SC	CREW HE	AD WITH	TANG
Inches 6 Width ½	8 Inches		12 12				
Cut #00 & 0 \$12.00 # # 1 & 2 13.00		1½x¼ 2 \$2.80 \$	2x3/8 3x3/8 6.40 \$8.50	 And the second of the second of		VITHOUT	
Weight, lboz., per doz. 1-12	3-0 Weight, 1		3-0 3-0	3 Inches Weight, lb.	oz., per doz.		\$4.00 0-3
Page 16 COIL	Page 16	FLAT		Page 16	INISHIN	G OR STR	IPPING
	사용하다 하는 사람들이 가득하는 것이 없었다.	en cut for Soft l		Inches Size		10 1½x ⁷ / ₂₂	12 11/4x9/2
Size $\frac{3\frac{1}{2}}{4x_3}$	5/8×5/32 18/6×		12 11/4×5/16	Cut # 2.	\$8.50	\$12.00	\$16.00 18.00
Doz. \$1.9 Weight, lboz., per doz. 0-			\$16.00 13-8	" #6. Weight,	11.00		20.00
	I have the			per de		8-12	14-3
Page 17	SQUARE EDG					UNDEDG	
Size	- 1/6x3/2 5/8x1/8	8 10 18/6x5/2 1x3/		14 13/8×1/4	8 18/6×5/2	10 1x ⁸ / ₁₆	12 13/6x ⁷ /32
Cut #00—Same as Bastard # 1—Same as 2nd Cut # 2 Same as Smarth	. 3.30 4.40	\$4.90 \$6.30 5.60 7.10	0 9.20	\$13.00 14.00	\$6.60 7.00	\$7.90 8.70	\$9.80
" * 2—Same as Smooth Weight, lboz., per doz		6.40 7.96 3-0 5-		15.00 13-12	7.60 2-10	9 .50 5-5	11.60 8-5
Page 17	TAPER SAW			Page 17	SLIM 1	CAPER SA	w
InchesWidth	4 5 11/ ₅₂ 18/ ₅₂	6 7 15/32 9/16	8 19/2	4 1⁄4	5 6 9 ₈₂ 11		8
Doz	\$3.00 \$3.70 \$	4.00 \$4.60	\$6.00	\$2.90 \$	3.30 \$3.	70 \$4.20	\$5.20
Weight, lboz., per doz.	0-12 1-0	2-0 3-0	4-0	0-6	0-9 1	-2 1-12	2-8
Page 18 EXTRA SLIN		Page 18 RIGHT	PIVOT	r HAND	Page 19	BROACH	
Inches 5 Width 7/22	6 7 8	2 3 Inches		\$8.50	3 Inches		\$1.90
Doz	English Berger and the control of th		-oz., per doz			Drill Gauge 4	
Page 18 ROUND	EDGE JOINT	1	Page 18	SOUA	RE EDGE	IOINT	
Inches	4	6	Inches			4	6
I nickness B. & S. Gauge	to	10	Thickness	B. & S. Gauge	3	14 16	10 12
a a a		14 16	a	a a	-	18 20	14 16
Width Cut #0, 2	\$3.40	9/16 5.20	Width Cut # 0,	2	*******	⁷ / ₁₆ 3.20	9/16 5.00
Weight, lboz., per doz		1-3		ooz., per doz.		0-8	1-3

AMERICAN SWISS FILE



AND TOOL COMPANY

Page 19 FORK Inches 6 Width % Thickness, B. & S. Gauge 12 Cut #0 \$8.00 Cut #2 \$8.50 Weight, lboz., per doz. 1-8	Page 19 DIE SINKERS Inches 3½ Cut #0, 1, 2 \$4.40 Set of 12 Assorted 4.40 Weight, lboz. per doz. 0-4	Set of 8 Assorted
Page 20 STRAIGHT Inches 4 4¾ Cut #0, 2, 4, 6 \$2.50 \$2.80 Set of 12 Assorted 2.50 2.80 Weight, lboz., per doz. 0-2 0-3	\$3.20 \$3.50 Cut 3.20 3.50 Set of	BENT es. 6 1/4 # 0, 2, 4, 6. \$4.00 of 12 Assorted 4.00 ght, lboz., per doz. 0-6
Size 3¼ x ¼ Si Cut #00, 0, 2 \$5.00 C Set of 12 Assorted 5.00 Se	Page 21 MACHINE FILES — Size B ze 3½ x ½ ut \$00, 0, 2	Page 21 MACHINE FILES—Size C Length of Cut 5 in, Length Over All 7 in, Cut #00, 0, 2
Page 21 Cut #00-0-2 Size 4¾ x ½ WILL NOT E	MACHINE FILES—Size D in. Length of Cut 3 SE MANUFACTURED DURING TH	1/2 in. Weight 14 oz. per doz.
\$\frac{1}{3}\cdot \text{-in.} \text{5.20} \frac{1}{3}\cdot \text{-in.} \text{7.20} \frac{1}{3}\cdot \text{-in.} \text{3.6}\cdot \text{-in.}	inife Pippin C $x \frac{5}{6}$ -in. $\frac{11}{22}$ -in. $x \frac{6}{64}$ -in. $\frac{3}{8}$ -in 8.40 \$9.30	\$8.40 $\frac{3}{4}$ -in\$7.00 $\frac{3}{16}$ -in. x $\frac{3}{32}$ -in. \$7.30 8.40 $\frac{1}{4}$ -in 7.20 $\frac{1}{4}$ -in. x $\frac{1}{5}$ -in. 7.60 8.60 $\frac{3}{6}$ -in. 8.00 $\frac{3}{6}$ -in. x $\frac{3}{16}$ -in. 7.80 9.20 $\frac{1}{2}$ -in. 8.40 $\frac{1}{2}$ -in. x $\frac{1}{4}$ -in. 8.50
Cut #0, 2, 4 \$7.50 \$	tum 6½ Large 7 Inches	ULAR SILVERSMITHS' RIFFLERS 7½ \$10.80 orted 10.80 ., per doz. 0-12
	EMAKERS' RIFFLERS (Pages BE MANUFACTURED DURING TI	
Page 30 CORRUGATING Inches. Size. Coarse. Medium. Fine. Weight, lboz., per doz.	6 4x \frac{6}{32} \$4.40 4.60 4.80 2-12 Page 30 AUGER BIT Inches Cut \#1 Weight, lboz., per doz	

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